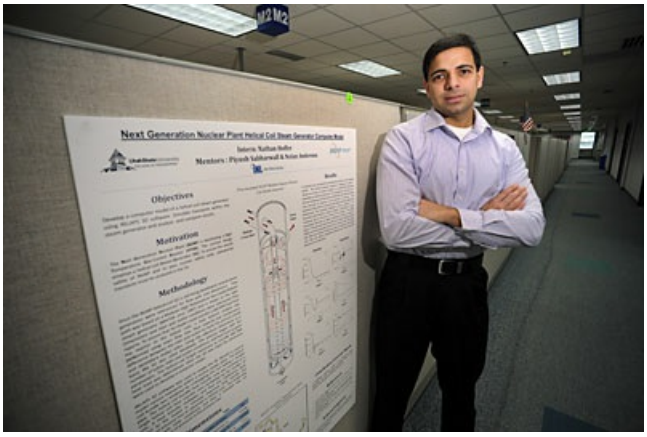
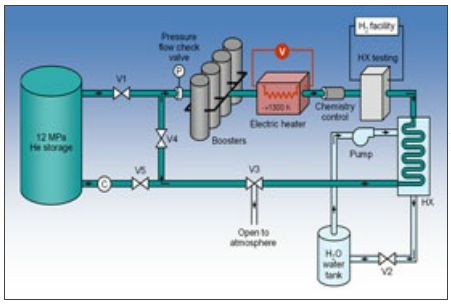


Piyush Sabharwall, heat transport lead research scientist at the INL, was named one of this year's New Faces in Engineering by the National Engineer Week Foundation.

INL researcher Piyush Sabharwall rewarded for professional dedication and community service

By Cathy Koon for *INL Nuclear Science & Technology Communications*

Piyush Sabharwall, a heat transport lead research scientist at Idaho National Laboratory, has been named one of the New Faces of Engineering by the National Engineer Week Foundation for his "exciting and unique work and the resulting impact on the engineering community and the society. "



Sabharwall's conceptual design for a high-temperature test facility.

Sabharwall develops high temperature nuclear reactor technologies for hydrogen production applications. He has been at INL for the last six years, the first four as a doctorate student.

The New Faces of Engineering, nominated from organizations nationwide, are young engineers who have been in the workplace five years or less and have shown outstanding abilities in projects that significantly impact the engineering community and also have an impact on development and growth. The National Association of Mechanical Engineers nominated 29-year-old Sabharwall for this award because of his outstanding scientific achievements and for his enthusiasm for the profession.

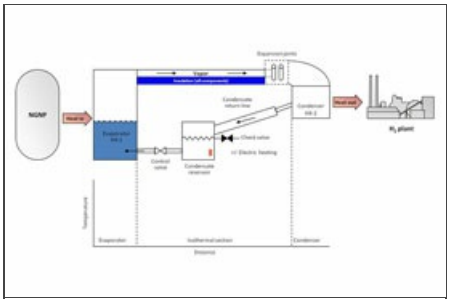
The foundation also looks at candidates' volunteer work and community involvement. Sabharwall is as involved in volunteer service to professional organizations and the community as he is in his work. Sabharwall has volunteered with Habitat for Humanity, and participated in various science and community fairs. He enjoys "educating the students about nuclear energy, increasing their knowledge of the subject and describing how exciting a career in this field is," he said. He has volunteered and set up science booths at fairs and organized competitions for students which aim to increase interest in nuclear energy. A member of the American Society of Mechanical Engineering since the fall of 2001, Sabharwall recently judged an ASME design competition for the Mechanical Engineering Department at BYU-Idaho. In addition, he was president and co-founder of a new North American Young Generation in Nuclear chapter in Idaho and currently serves as NE mission director for the Idaho chapter of the American Nuclear Society.

Sabharwall and the other award recipients will receive the award through the mail. Their names will be listed on the foundation's website http://eweek.org/Home.aspx, and the awards will be announced in USA Today in late February. "I was excited to be chosen and was also surprised as I know that competition is really very hard as many young professionals across the country apply for it," Sabharwall said on hearing the news of his selection.

The New Faces of Engineering isn't the first honor bestowed on the young man. Sabharwall came to INL as recipient of the INL Fission and Fusion Systems Fellowship to pursue doctoral studies and research in areas consistent with the Department of Energy (DOE) Nuclear Energy Program. He works for Mike Patterson, New Generation Nuclear Power program manager, and George Griffith, Nuclear Science and Technology Thermal Fluids and Reactor Safety manager.

Originally from India, he received a scholarship to pursue his senior year in mechanical engineering at Wilkes University in Pennsylvania. He finished his masters in nuclear engineering with a minor in mechanical engineering at Oregon State University, where he worked on the development of STAR-LM, a conceptual liquid metal reactor in conjunction with Argonne National Lab.

Sabharwall says his research into hydrogen production and other process heat applications "are integral to the DOE strategic plans for the sustained advances in nuclear energy. In the past, I have had extensive experience in the design and construction of large scale experimental systems for nuclear and thermal-hydraulic research."



Sabharwall's work includes this thermosyphon design for process heat

Dr. Tomasz Kozlowski of Sweden's Royal Institute of Technology said: "Dr. Sabharwall's contributions to nuclear reactor thermal-hydraulics, two-phase heat transfer and advanced reactor

design have set him apart from other researchers. Through his work, Dr. Sabharwall displayed exceptional aptitude for physics, mathematics and practical design. His remarkable grasp of these subjects and his ability to extend abstract scientific ideas into practical, useful solutions is a skill that very few people in the scientific research are able to master and apply successfully.

Sabharwall has authored over 35 publications including two books, journal articles, conference proceedings, technical abstracts, magazines and technical reports and has acted as a reviewer for journal and conference proceedings.

Related Links
Read Sabharwall's 2009 paper, "Engineering Design Elements of a Two-Phase Thermosyphon to Transfer NGNP Thermal Energy to a Hydrogen Plant."
Read more about the National Engineers Week Foundation's New Faces of Engineering.

Feature Archive